

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application:

Claim 1 (currently amended): A bandwidth-adaptive method for synchronizing a consumer node representations of a dynamic data set and a source node representation of the dynamic data set, the method comprising the steps of:

(a) receiving, at a communications service from a source node, a metadata packet identifying a plurality of data packets that represent a state of at least a portion of a changing data set at a point in time;

(b) receiving, at the communications service from the source node, at least one of the identified data packets;

(c) selecting ~~at least one of the received~~ first and second sets of the identified data packets responsive to the received metadata packet, the first and second sets being different from one another;

(d) transmitting, from the communications service to a first consumer node, the metadata packet and the first set of identified data packets for synchronization of a first dynamic data set represented at the first consumer node with the state of the changing data set represented at the source node at the point in time; and

(e) transmitting, from the communications service to ~~the~~ a second consumer node having a different bandwidth connection with the communications service than the first consumer node has with the communications service, the ~~selected at least one~~ metadata packet and the second set of identified data packets for synchronization of a second dynamic data set represented at the second consumer node with the state of the changing data set represented at the source node at the point in time.

Claim 2 (currently amended): The method of claim 1 further comprising the step of, before step (c), receiving a request from at least one of the first and second consumer nodes for a current state of the changing data set.

Claim 3 (currently amended): The method of claim 2 further comprising the step of repeating steps (a) and (b) until the request is received ~~from the consumer node for the current state of the changing data set~~.

Claim 4 (currently amended): The method of claim 3 wherein selecting a set of the identified data packets in step (c) comprises the steps of:

- (c-a) selecting one of the received metadata packets; and
- (c-b) selecting at least one of the received data packets identified by the selected metadata packet.

Claim 5 (currently amended): The method of claim 1 wherein selecting a set of the identified data packets in step (c) comprises selecting a plurality of the received data packets responsive to the received metadata packet.

Claim 6 (currently amended): The method of claim 5 wherein step (d) comprises transmitting to the first consumer node each of the selected plurality of data packets.

Claim 7 (previously presented): The method of claim 1 wherein step (b) comprises receiving, at the communications service from the source node, at least one of the identified data packets in encrypted form.

Claim 8 (previously presented): The method of claim 1 further comprising the step of storing the received metadata packet in a memory device.

Claim 9 (currently amended): The method of claim 1 further comprising the step of storing ~~the received~~ at least one received data packet in a memory device.

Claim 10 (currently amended): The method of claim 9 wherein selecting a set of the identified data packets in step (c) comprises:

- (c-a) selecting at least one of the received data packets responsive to the received metadata packet; and
- (c-b) selecting at least one of the stored data packets responsive to the received metadata packet.

Claim 11 (currently amended): The method of claim 10 where step ~~(e)~~(d) comprises:

- ~~(e)~~d-a) transmitting to the first consumer node the selected at least one of the received data packets; and
- ~~(e)~~d-b) transmitting to the first consumer node the selected at least one of the stored data packets.

Claim 12 (currently amended): The method of claim 1 further comprising the step of storing, in a memory element, metadata information identifying ~~the at least one~~ a data packet transmitted to one of the first and second consumer nodes.

Claim 13 (currently amended): The method of claim 12 ~~further comprising the step of~~ wherein selecting a set of the identified data packets in step (c) comprises selecting at least one of the received data packets that is responsive to the received metadata packet and to the stored metadata information ~~identifying the at least one data packet transmitted to the consumer node.~~

Claim 14 (currently amended): A bandwidth-adaptive system for synchronizing consumer node representations and a source node representation of a changing data set, the system comprising:

a source node for transmitting ~~at least one metadata packet, each~~ metadata packet identifying a plurality of data packets that represent a current state of a changing data set at a point in time, and for transmitting at least one of the identified data packets; and
a communications service in communication with the source node, the communications service for:

a) ~~selecting, one of the at least one metadata packet and at least one~~ in response to the received metadata packet, a first set of the identified data packets for transmission to a first consumer node and a second set of the identified data packets, different from the first set, for transmission to a second consumer node having a different bandwidth connection with the communications service than the first consumer node has with the communications service;

b) transmitting the first set of the identified data packets, along with the metadata packet, to the first consumer node for synchronization of a first dynamic data set represented at the first consumer node with the state of the changing data set represented at the source node at the point in time; and

c) transmitting the second set of the identified data packets, along with the metadata packet, to the second consumer node for synchronization of a second dynamic data set represented at the second consumer node with the state of the changing data set represented at the source node at the point in time.

Claim 15 (previously presented): The system of claim 14 further comprising the first consumer node, and wherein the first consumer node requests the current state of the changing data set from the communications service.

Claim 16 (currently amended): The system of claim 15 wherein the communications service selects ~~one of the at least one metadata packet and the at least one~~ the first set of identified data packets in response to the request made by the first consumer node.

Claim 17 (currently amended): The system of claim 15 further comprising ~~a~~ the second consumer node, and wherein the second consumer node requests the current state of the changing data set from the communications service.

Claim 18 (original): The system of claim 17 wherein the source node transmits a plurality of metadata packets, each of the plurality of metadata packets representing one state of the changing data set.

Claim 19 (previously presented): The system of claim 18 wherein the communications service selects a first metadata packet to transmit to the first consumer node and a second metadata packet to transmit to the second consumer node.

Claim 20 (original): The system of claim 14 wherein the communications service further comprises a memory element.

Claim 21 (original): The system of claim 20 wherein the memory element is a persistent storage device.

Claim 22 (currently amended): The system of claim 20 wherein the communications service stores the received ~~at least one~~ metadata packet in the memory element.

Claim 23 (original): The system of claim 20 wherein the communications service stores the received at least one data packet in the memory element.

Claim 24 (currently amended): The system of claim 20 wherein the communications service stores in the memory element information regarding transmission of data packets to the first consumer node.

Claim 25 (currently amended): The system of claim 14 wherein the source node encrypts the at least one data packet before transmission ~~to the consumer node~~.

Claim 26 (currently amended): A communications service for synchronizing consumer node representations and a source node representation of a changing data set, the service comprising:

a receiving subsystem for receiving i) ~~at least one~~ metadata packet identifying a plurality of data packets representing a current state of a changing data set and ii) at least one data packet identified by the received ~~at least one~~ metadata packet;

a synchronization engine for selecting, ~~one of the at least one metadata packet and at least one~~ in response to the received metadata packet, first and second sets of the identified data packets, the first and second sets being different from one another; and

a transmission subsystem for transmitting i) ~~the selected one of the at least one~~ metadata packet and the ~~selected at least one~~ first set of identified data packets to a first consumer node, and ii) the metadata packet and the second set of identified data packets to a second consumer node having a different bandwidth connection with the communications service than the first consumer node has with the communications service.

Claim 27 (original): The communications service of claim 26 further comprising a memory element.

Claim 28 (currently amended): The communications service of claim 26 wherein the synchronization engine selects ~~one of the at least one metadata packet and the at least one~~ the first set of identified data packets in response to a request received from ~~a~~ the first consumer node.

Claim 29 (currently amended): A ~~bandwidth-adaptive~~ method for synchronizing a consumer node representation of a dynamic data set and a source node representation of the dynamic data set, the method comprising the steps of:

(a) receiving from a source node a first metadata packet identifying a first plurality of data packets that represent a state of at least a portion of a changing data set at a first point in time;

(b) receiving from the source node a second metadata packet identifying a second plurality of data packets that represent a state of at least a portion of a changing data set at a second point in time;

(c) generating, ~~a third metadata packet representing~~ by determining the difference between the first ~~set of identified data packets~~ metadata packet and the second ~~set of identified~~

~~data packets~~metadata packet, ~~the~~a third metadata packet identifying a third plurality of data packets;

(d) transmitting to a consumer node the third metadata packet; and

(e) transmitting to the consumer node at least one of the identified third plurality of data packets for synchronization of a dynamic data set represented at the consumer node with the state of the changing data set represented at the source node at the second point in time.